

Amendments To The Claims:

Claim 1. (Currently Amended) A catheter assembly comprising:

a substantially hollow proximal tubular member, at least a portion of the proximal tubular member having a coating of at least one thermoplastic polymer thereabout, the proximal tubular member having an end region, at least the end region having the coating of at least one thermoplastic polymer;

a substantially distal outer tubular member, the distal outer tubular member having an end region, a first portion of the end region of the distal outer tubular member being engaged to a first portion of the coating on a first portion of the end region of the proximal tubular member to define a first engagement region, the first engagement region comprising the first portion of the end region of the distal outer tubular member radially overlapping the first portion of the end region of the proximal tubular member, a first portion of the coating and the first portion of the end region of the distal outer tubular member being bonded together, the proximal tubular member and the distal outer tubular member defining at least one continuous central lumen therethrough; and

a substantially hollow inner tubular member, at least a portion of the distal outer tubular member disposed about at least a portion of the inner tubular member, a first portion of the inner tubular member engaged to the coating on a second portion of the end region of the proximal tubular member to define a second engagement region, a second portion of the inner tubular member engaged to a second portion of the end region of the distal outer member to define a third engagement region, the end region of the proximal tubular member extending distally into the distal outer tubular member adjacent to the at least a portion of the inner tubular member.

Claim 2. (Original) The catheter assembly of claim 1 wherein the catheter assembly is a balloon catheter.

Claim 3. (Original) The catheter assembly of claim 1 wherein the catheter assembly is a monorail catheter or a rapid-exchange catheter.

Claim 4. (Original) The catheter assembly of claim 1 wherein the proximal tubular member is at least partially constructed from metal.

Claim 5. (Original) The catheter assembly of claim 1 wherein the coating is selected from at

least one member of the group consisting of: nylon, polyester elastomer, polyether/block polyamide, polyamide, fluoro-polymer, PEEK, PE, polyurethane, POC, PTFE and any combination thereof.

Claim 6. (Original) The catheter of claim 1 wherein the proximal tubular member is a hypotube.

Claim 7. (Original) The catheter of claim 1 wherein the distal outer tubular member is at least partially constructed from at least one polymeric material.

Claim 8. (Original) The catheter of claim 1 wherein the distal outer tubular member is at least partially constructed from at least one member of the group consisting of: nylon, polyester elastomer, polyether/block polyamide, polyamide, fluoro-polymer, PEEK, PE, polyurethane, POC, PTFE and any combination thereof.

Claim 9. (Cancelled)

Claim 10. (Cancelled)

Claim 11. (Cancelled)

Claim 12. (Currently Amended) The catheter assembly of claim [[9]] wherein a first portion of the coating and the first portion of the end region of the distal outer tubular member are ~~fused~~ bonded together in a continuous layer.

Claim 13. (Original) The catheter assembly of claim 1 wherein the inner member defines a guide wire lumen.

Claim 14. (Original) The catheter assembly of claim 1 wherein the inner member is at least partially constructed from at least one member of the group consisting of: nylon, polyester elastomer, polyether/block polyamide, polyamide, fluoro-polymer, PEEK, PE, polyurethane, POC, PTFE and any combination thereof.

Claim 15. (Original) The catheter assembly of claim 1 wherein the proximal tubular member has a substantially elliptical cross-sectional shape.

Claim 16. (Withdrawn) A method for assembling a catheter comprising the steps of:

- providing a substantially hollow proximal tubular member, the proximal tubular member defining an interior surface and an exterior surface, at least a portion of the exterior surface being coated with at least one thermoplastic polymer, the proximal tubular member having an end region;

- providing a substantially hollow distal outer tubular member, the distal outer tubular member defining an interior surface and an exterior surface and having an end region;
- providing a substantially hollow inner tubular member, the inner tubular member defining a guide wire lumen;
- disposing at least a portion of the distal outer tubular member about at least a portion of the inner tubular member;
- positioning at least a portion of the end region of the distal outer tubular member adjacent to at least a portion of the end region of the proximal tubular member to define a first engagement region, the proximal tubular member and the distal outer tubular member defining at least one continuous central lumen that extends therethrough;
- bonding at least a portion of the at least one thermoplastic polymer to the at least a portion of the end region of the distal outer tubular member;
- bonding at least a portion of the at least one thermoplastic polymer to a portion of the inner tubular member; and
- engaging at least a portion of the end region of the distal outer tubular member to a portion of the inner tubular member.

Claim 17. (New) A catheter assembly comprising:

a substantially hollow proximal tubular member, at least a portion of the proximal tubular member having a coating of at least one thermoplastic polymer thereabout, the proximal tubular member having an end region, at least the end region having the coating of at least one thermoplastic polymer;

a substantially distal outer tubular member, the distal outer tubular member having an end region, a first portion of the end region of the distal outer tubular member being engaged to a first portion of the coating on a first portion of the end region of the proximal tubular member to define a first engagement region, the first engagement region comprising the first portion of the end region of the distal outer tubular member radially overlapping the first portion of the end region of the proximal tubular member, a first portion of the coating and the first portion of the end region of the distal outer tubular member are welded together in a butt-weld configuration. the proximal tubular member and the distal outer tubular member defining at least one continuous central lumen therethrough; and

a substantially hollow inner tubular member, at least a portion of the distal outer tubular member disposed about at least a portion of the inner tubular member, a first portion of the inner tubular member engaged to the coating on a second portion of the end region of the proximal tubular member to define a second engagement region, a second portion of the inner tubular member engaged to a second portion of the end region of the distal outer member to define a third engagement region, the end region of the proximal tubular member extending distally into the distal outer tubular member adjacent to the at least a portion of the inner tubular member.

Claim 18. **(New)** The catheter assembly of claim 17 wherein the catheter assembly is a balloon catheter.

Claim 19. **(New)** The catheter assembly of claim 17 wherein the catheter assembly is a monorail catheter or a rapid-exchange catheter.

Claim 20. **(New)** The catheter assembly of claim 17 wherein the proximal tubular member is at least partially constructed from metal.

Claim 21. **(New)** The catheter assembly of claim 17 wherein the coating is selected from at least one member of the group consisting of: nylon, polyester elastomer, polyether/block polyamide, polyamide, fluoro-polymer, PEEK, PE, polyurethane, POC, PTFE and any combination thereof.

Claim 22. **(New)** The catheter of claim 17 wherein the proximal tubular member is a hypotube.

Claim 23. **(New)** The catheter of claim 17 wherein the distal outer tubular member is at least partially constructed from at least one polymeric material.

Claim 24. **(New)** The catheter of claim 17 wherein the distal outer tubular member is at least partially constructed from at least one member of the group consisting of: nylon, polyester elastomer, polyether/block polyamide, polyamide, fluoro-polymer, PEEK, PE, polyurethane, POC, PTFE and any combination thereof.

Claim 25. **(New)** The catheter assembly of claim 17 wherein the inner member defines a guide wire lumen.

Claim 26. **(New)** The catheter assembly of claim 17 wherein the inner member is at least partially constructed from at least one member of the group consisting of: nylon, polyester

elastomer, polyether/block polyamide, polyamide, fluoro-polymer, PEEK, PE, polyurethane, POC, PTFE and any combination thereof.

Claim 27. **(New)** The catheter assembly of claim 17 wherein the proximal tubular member has a substantially elliptical cross-sectional shape.